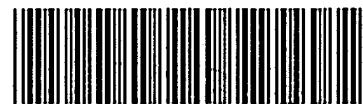


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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/076,785

DATE: 05/08/2002
TIME: 09:13:19

Input Set : N:\Crf3\RULE60\10076785.txt
Output Set: N:\CRF3\05082002\J076785.raw

3 <110> APPLICANT: Falco, S. Carl
 4 Famodu, Omolayo O.
 5 Klein, Ted
 6 Orozco, Emil M. Jr.
 7 Rafalski, J. Antoni
 8 Shen, Jennie
 9 Cahoon, Edgar B.
 10 Sakai, Hajime
 12 <120> TITLE OF INVENTION: Plant Proteinases
 14 <130> FILE REFERENCE: BB1336 US NA
 16 <140> CURRENT APPLICATION NUMBER: 10/076,785
 17 <141> CURRENT FILING DATE: 2002-02-15
 19 <150> PRIOR APPLICATION NUMBER: 09/501,423
 20 <151> PRIOR FILING DATE: 2000-02-09
 23 <150> PRIOR APPLICATION NUMBER: 60/119,599
 24 <151> PRIOR FILING DATE: 1999-02-10
 26 <160> NUMBER OF SEQ ID NOS: 58
 28 <170> SOFTWARE: Microsoft Office 97
 30 <210> SEQ ID NO: 1
 31 <211> LENGTH: 304
 32 <212> TYPE: DNA
 33 <213> ORGANISM: Zea mays
 35 <220> FEATURE:
 36 <221> NAME/KEY: unsure
 37 <222> LOCATION: (257)
 39 <220> FEATURE:
 40 <221> NAME/KEY: unsure
 41 <222> LOCATION: (266)
 43 <220> FEATURE:
 44 <221> NAME/KEY: unsure
 45 <222> LOCATION: (269)
 47 <220> FEATURE:
 48 <221> NAME/KEY: unsure
 49 <222> LOCATION: (283)
 51 <220> FEATURE:
 52 <221> NAME/KEY: unsure
 53 <222> LOCATION: (290)
 55 <220> FEATURE:
 56 <221> NAME/KEY: unsure
 57 <222> LOCATION: (297)
 59 <400> SEQUENCE: 1
 60 gaaaccagca tttgctacta gtagaaaagca aaacgagctt tgggtatcca ttcttgagaa 60
 61 ggcttatgca aaacttcatg gctcttatga ggcattggaa ggtggccttg ttcaagatgc 120

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/076,785

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TIME: 09:13:19

Input Set : N:\Crf3\RULE60\10076785.txt
Output Set: N:\CRF3\05082002\J076785.raw

62 tctagtcat ctcacaggag gagctggta agagattgtat atgcgaagtc ctcaagccca 180
63 acttgatctt gctagtggaa gattgtggtc gcagttgttgcatttcaaacc aagaagttt 240
W--> 64 cttcttggtg ctggaantct tcgggntcng aggcccaaatt cnnaacaggn gatttnagg 300
65 gaac 304
67 <210> SEQ ID NO: 2
68 <211> LENGTH: 58
69 <212> TYPE: PRT
70 <213> ORGANISM: Zea mays
72 <400> SEQUENCE: 2
73 Phe Ala Thr Ser Arg Lys Gln Asn Glu Leu Trp Val Ser Ile Leu Glu
74 1 5 10 15
76 Lys Ala Tyr Ala Lys Leu His Gly Ser Tyr Glu Ala Leu Glu Gly Gly
77 20 25 30
79 Leu Val Gln Asp Ala Leu Val Asp Leu Thr Gly Gly Ala Gly Glu Glu
80 35 40 45
82 Ile Asp Met Arg Ser Pro Gln Ala Gln Leu
83 50 55
85 <210> SEQ ID NO: 3
86 <211> LENGTH: 423
87 <212> TYPE: DNA
88 <213> ORGANISM: Oryza sativa
90 <220> FEATURE:
91 <221> NAME/KEY: unsure
92 <222> LOCATION: (128)
94 <220> FEATURE:
95 <221> NAME/KEY: unsure
96 <222> LOCATION: (198)
98 <220> FEATURE:
99 <221> NAME/KEY: unsure
100 <222> LOCATION: (204)
102 <220> FEATURE:
103 <221> NAME/KEY: unsure
104 <222> LOCATION: (250)
106 <220> FEATURE:
107 <221> NAME/KEY: unsure
108 <222> LOCATION: (263)
110 <220> FEATURE:
111 <221> NAME/KEY: unsure
112 <222> LOCATION: (293)
114 <220> FEATURE:
115 <221> NAME/KEY: unsure
116 <222> LOCATION: (311)
118 <220> FEATURE:
119 <221> NAME/KEY: unsure
120 <222> LOCATION: (319)
122 <220> FEATURE:
123 <221> NAME/KEY: unsure
124 <222> LOCATION: (328)
126 <220> FEATURE:

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TIME: 09:13:19

Input Set : N:\Crf3\RULE60\10076785.txt
Output Set: N:\CRF3\05082002\J076785.raw

```

127 <221> NAME/KEY: unsure
128 <222> LOCATION: (346)
130 <220> FEATURE:
131 <221> NAME/KEY: unsure
132 <222> LOCATION: (365)..(366)
134 <220> FEATURE:
135 <221> NAME/KEY: unsure
136 <222> LOCATION: (374)
138 <220> FEATURE:
139 <221> NAME/KEY: unsure
140 <222> LOCATION: (384)
142 <220> FEATURE:
143 <221> NAME/KEY: unsure
144 <222> LOCATION: (388)
146 <220> FEATURE:
147 <221> NAME/KEY: unsure
148 <222> LOCATION: (395)
150 <220> FEATURE:
151 <221> NAME/KEY: unsure
152 <222> LOCATION: (399)..(400)
154 <220> FEATURE:
155 <221> NAME/KEY: unsure
156 <222> LOCATION: (412)..(413)
158 <220> FEATURE:
159 <221> NAME/KEY: unsure
160 <222> LOCATION: (422)
162 <400> SEQUENCE: 3
163 gggaaacccg catttgctac tatgtagaaa gcaaaatgag ctgtgggtat ccattcttga 60
164 aaaagcttat gcaaagcttc atggctcta tgaggcattg gagggtgggc ttgtgcaaga 120
W--> 165 tgctctantg gatctcacag gaggagctgg tgaagagatt gacatgcgga gcccccaagc 180
W--> 166 gcagattgat cttgctantg gaangattgt ggtctcagtt gttgcatttt aaacaagagg 240
W--> 167 gctttcttcn tggggctggg aantccttcc ggcccgatg ctcaatattt cancaagtgg 300
W--> 168 cattgttcaa nggacatgnc cttactcnna ttttgcaggg taaagnagaa agtttgaatg 360
W--> 169 ggcannaagc ctcngtggca aaanttanaa aaatnccnn gggggccaaaa anngaaagtt 420
W--> 170 tnt 423
172 <210> SEQ ID NO: 4
173 <211> LENGTH: 47
174 <212> TYPE: PRT
175 <213> ORGANISM: Oryza sativa
177 <220> FEATURE:
178 <221> NAME/KEY: UNSURE
179 <222> LOCATION: (34)
181 <400> SEQUENCE: 4
182 Lys Gln Asn Glu Leu Trp Val Ser Ile Leu Glu Lys Ala Tyr Ala Lys
183 1 5 10 15
185 Leu His Gly Ser Tyr Glu Ala Leu Glu Gly Gly Leu Val Gln Asp Ala
186 20 25 30
W--> 188 Leu Xaa Asp Leu Thr Gly Gly Ala Gly Glu Glu Ile Asp Met Arg
189 35 40 45

```

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Output Set: N:\CRF3\05082002\J076785.raw

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Input Set : N:\Crf3\RULE60\10076785.txt
Output Set: N:\CRF3\05082002\J076785.raw

251 acttaggtac ttgcatgcag caagattgat tgaagttgtc caggaggcaa ttccataacc 480
 252 cattatctag ttcccgagaa cccacagctg gatcctgcgt gcacgggtgc ccagcagacg 540
 253 cagctaccat caaacacatg gatatcaat ctgtactaa acagcctcta gtctgattga 600
 254 tgctttgaa aaaactgaca aaacaaaagg tgcttcctcc ccaggggtgaa tggtagttgg 660
 255 cacaatttgtt accctttgg gataaggatc caagaccagt tcgcataatgttcc 720
 256 gttaacgtaa tctgttccac cagcgcttc atgcataatgttcc 780
 257 gccctgtgtc ttgagtatcc tcattccaat gtaaaacatt gaagaatcat ggcttagattg 840
 258 gtagttccga aaaccattcg tctttctaga gaaacccaaca ccctgatgaa ggtaataaaa 900
 259 aacgtgaaca gggtatagtg catcacgtcc tgttactcta agtgcataact gtggattttg 960
 260 gtgccacgag tcataatctt ggcaaccacc tgcatgttag ccacgcccatt gcccattggac 1020
 261 agagtaacgc atctcaggtg gataaaacacg acaaacatatttgcatttgc 1080
 262 aaaatcttgc caagacatcc agaatacccc attcttcgac tggaaacat gcatgagctt 1140
 263 atgcttcatc cgttccgtcc actctggta cgagtctgac catggccat tccattcaac 1200
 264 ttcatttgcc catggatttc tgatttgat gagttgtgg ccatcaactt ctcttacctg 1260
 265 caaaaatttgc tacgcataatgc cctgaacaat gccacttgat gagatgtgag catcagatcc 1320
 266 agaaggactt ccagcaccaa gaagaaaacc ttcttggat aaatgcaaca actgcgacca 1380
 267 caatcttcca ctagcaagat caagttggc ttgaggactt cgcatatcaa tcttttcacc 1440
 268 agctcctcct gtgagatcga ctagagcatc ttgaaacaagc ccaccttcca atgcctcata 1500
 269 agagccatga agtttgcatt aagccttctc aagaatggat acccaaagct cgtttgctt 1560
 270 tctacttaga gcaaatgcgtt gtttcctcgtt gc 1592
 272 <210> SEQ ID NO: 8
 273 <211> LENGTH: 337
 274 <212> TYPE: PRT
 275 <213> ORGANISM: Zea mays
 277 <400> SEQUENCE: 8
 278 Thr Arg Lys Pro Ala Phe Ala Thr Ser Arg Lys Gln Asn Glu Leu Trp
 279 1 5 10 15
 280 Val Ser Ile Leu Glu Lys Ala Tyr Ala Lys Leu His Gly Ser Tyr Glu
 281 20 25 30
 282 Ala Leu Glu Gly Gly Leu Val Gln Asp Ala Leu Val Asp Leu Thr Gly
 283 35 40 45
 284 Gly Ala Gly Glu Glu Ile Asp Met Arg Ser Pro Gln Ala Gln Leu Asp
 285 50 55 60
 286 Leu Ala Ser Gly Arg Leu Trp Ser Gln Leu Leu His Phe Lys Gln Glu
 287 65 70 75 80
 288 Gly Phe Leu Leu Gly Ala Gly Ser Pro Ser Gly Ser Asp Ala His Ile
 289 85 90 95
 290 Ser Ser Ser Gly Ile Val Gln Gly His Ala Tyr Ser Ile Leu Gln Val
 291 100 105 110
 292 Arg Glu Val Asp Gly His Lys Leu Ile Gln Ile Arg Asn Pro Trp Ala
 293 115 120 125
 294 Asn Glu Val Glu Trp Asn Gly Pro Trp Ser Asp Ser Ser Pro Glu Trp
 295 130 135 140
 296 Thr Glu Arg Met Lys His Lys Leu Met His Val Pro Gln Ser Lys Asn
 297 145 150 155 160
 298 Gly Val Phe Trp Met Ser Trp Gln Asp Phe Gln Ile His Phe Arg Ser
 299 165 170 175
 300 Ile Tyr Val Cys Arg Val Tyr Pro Pro Glu Met Arg Tyr Ser Val His
 301 180 185 190

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/08/2002
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Input Set : N:\Crf3\RULE60\10076785.txt
Output Set: N:\CRF3\05082002\J076785.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 257,266,269,283,290,297
Seq#:3; N Pos. 128,198,204,250,263,293,311,319,328,346,365,366,374,384,388
Seq#:3; N Pos. 395,399,400,412,413,422
Seq#:4; Xaa Pos. 34
Seq#:5; N Pos. 553,562,584
Seq#:13; N Pos. 120,283,299,337,479
Seq#:14; Xaa Pos. 40,94,99,112,159
Seq#:15; N Pos. 342,634
Seq#:16; Xaa Pos. 114
Seq#:21; N Pos. 645,680,740
Seq#:22; Xaa Pos. 209,220
Seq#:25; N Pos. 362,375,398
Seq#:26; Xaa Pos. 121,125
Seq#:29; N Pos. 434,462,495,515
Seq#:30; Xaa Pos. 9,16,27,36
Seq#:33; N Pos. 628,674,740
Seq#:34; Xaa Pos. 65,66,67,68,276
Seq#:37; N Pos. 327,350,359,372,397,423,448,459,486,492
Seq#:38; Xaa Pos. 109
Seq#:43; N Pos. 358,402,410,439,447,495,571,574,600,602
Seq#:45; N Pos. 384,469
Seq#:58; N Pos. 26,46,79,107

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Input Set : N:\Crf3\RULE60\10076785.txt
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L:64 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:240
L:165 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:120
L:166 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:180
L:167 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:240
L:168 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:300
L:169 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:360
L:170 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:420
L:188 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:4
L:188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:32
L:218 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:5
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:540
L:580 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:580 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:60
L:583 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:240
L:584 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:300
L:586 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:420
L:621 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:14
L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:32
L:630 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:14
L:630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:80
L:633 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:14
L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:96
L:642 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:14
L:642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:144
L:667 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:300
L:672 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:600
L:706 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:16
L:706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:112
L:913 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:21
L:913 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:600
L:914 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:21
L:914 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:660
L:915 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:21
L:915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:720
L:970 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:22
L:970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:208

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Input Set : N:\Crf3\RULE60\10076785.txt
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L:1105 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:25
L:1105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:360
L:1143 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:26
L:1143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:112
L:1374 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:29
L:1374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:420
L:1375 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:29
L:1375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:480
L:1399 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:30
L:1399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:1402 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:30
L:1402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:16
L:1405 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:30
L:1405 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:32
L:1616 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:33
L:1616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:600
L:1617 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:33
L:1617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:660
L:1618 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:33
L:1618 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:720
L:1646 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:34
L:1646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:64
L:1685 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:34
L:1685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:272
L:1821 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:37
L:1821 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:300
L:1822 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:37
L:1822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:360
L:1823 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:37
L:1823 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:420
L:1824 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:37
L:1824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:480
L:1854 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:38
L:1854 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:96
L:2004 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:43
L:2004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:300
L:2005 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:43
L:2005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:360
L:2006 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:43
L:2006 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:420
L:2007 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:43
L:2007 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:480
L:2008 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:43
L:2008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:540
L:2009 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:43
L:2009 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:600
L:2055 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:45
L:2055 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:360
L:2056 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:45

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L:2056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:420
L:2442 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:58
L:2442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0